

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

B7

120 B 011.1

特許庁
貴用新案公報

貴用新案出願公告
昭27-3908

公告 昭27.5.14 出願 昭24.10.25 (前特許出願日採用)
質願 昭25-17480

出願人 考案者 田邊信雄 山梨県南都留郡下吉田町729

(全2頁)

中空ボール外皮

画面の略解

第1圖は正面圖第2圖は平面圖第3,4圖は縦断面圖第5圖は從來品の一部断面を示す

貴用新案の性質、作用及效果の要領

本考案はフットボール、バレーボール等の如き縫合せてなる中空ボールの外皮はの裏面の縫合する部分を残しると同程度の厚さの扁平片いをはの裏面に附着したるものなり

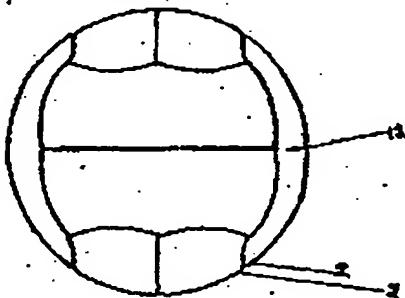
之を適宜の枚数にて縫合せ内部に充填したるとき扁平片いの周囲の切口1を以て縫合せたる縫合を相互に挟み合ふが故に凸凹なくチューブ3に空気を充填するとき從来のと異り平均に膨脹するが

故に縫合せたる部分ろを強烈に外部に壓迫することなきため全表面に比して外側部2多く磨滅をする事なく外皮表面は均等に磨滅をするため長期の使用を可能ならしむるものなり尚内部裏面は平坦なるためチューブの破損の憂をも減少せしむ

登録請求の範囲

圖面に示す如く外皮はの裏面に縫合せる部分の縫合を残し扁平片いを附着し適宜の枚数にて縫合せ之を内部に充填したるとき縫合せたる部分の縫合を扁平片いの周囲の切口1にて相互に挟み合ふ様としたる中空ボール外皮の構造

第1圖



(2)

实用新案出願公告
昭27-3908

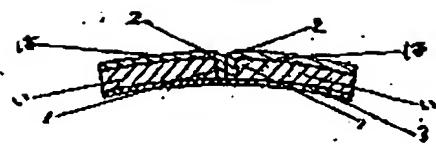
第2圖



第3圖



第4圖



第5圖



Japanese Patent Office
Examined Utility Model Application

120 B 011.1

Utility Model Application Publication No.: S27-3908

Date of Publication: May 14, 1952

Date of Application: October 24, 1949

(Date and Use of Previous Patent Application)

Application No. S25-27480

Applicant/Inventor: Nobuo Tanabe
729 Shimo Yoshida-machi
Minami Tsuru-gun,
Yamanashi Prefecture

(Total of 2 pages)

Hollow Ball Cover

Brief Explanation of Drawings

Figure 1 is a frontal view. Figure 2 is a top view. Figures 3 and 4 are views of longitudinal sections. Figure 5 is a partial cross sectional view of a previous product.

Overview of Materials, Operation, and Effects of this Utility Model

This utility model pertains to hollow balls that are sewn together, such as footballs, volleyballs, etc. Specifically, this utility model describes a process by which the edge of the rear surface of the cover (c), namely the sewn portion (b) is left as is, and a flat piece (a) is bonded to the rear surface of the cover (c) at the same thickness of the sewn portion (b).

When the proper number of completed portions are turned inward during sewing, the edges (b), which are sewn using the cut ends (1) that run along the circumference of

the flat pieces (a) match so that there is no unevenness over the surface, and when the tube (3) is inflated with air, the ball expands evenly without any extreme pressure placed on the outside along the sewn portions and without any significant wear occurring to any one portion of the outer surface. As a result of the even expansion that occurs to the surface of the cover, it is possible to extend the useful life of the ball as well as reduce the amount of damage that occurs to the tube due to the fact that the inner surface of the cover is also made more even.

Scope of Patent Claims

As shown in the drawing, when the edge (b) of the sewn portion on the rear side of the cover (c) is left as is, and a flat piece (a) is attached, the proper number of these completed pieces are turned inward during sewing to form a cover for a hollow ball in which the edges (b) of the sewn portions fit together evenly using the cut ends (1) that run along the circumference of the flat pieces (a).

Figure 1

(2)

Figure 2

Figure 3

Figure 4

Figure 5